L Number	Hits	Search Text	DB	Time stamp
-	1	"20030093943"	USPAT;	2004/10/30 09:48
_	1	 "20030093943" and toluene	US-PGPUB	
		20030093943 and toluene	USPAT; US-PGPUB	2004/10/30 09:50
-	44	(antioxidant with thermal) and 44/\$.ccls.	USPAT;	2004/10/30 09:51
-	9	(antioxidant with thermal) with (vitamin or tocopherol)	US-PGPUB USPAT;	2004/10/30 09:55
_	0		US-PGPUB	
		(antioxidant with thermal) with (vitamin or tocopherol) with food	USPAT; US-PGPUB	2004/10/30 09:55
-	0	(antioxidant with thermal) with (vitamin or tocopherol) with food	EPO; JPO;	2004/10/30 09:55
_	0	((antioxidant with thermal) with (vitamin or tocopherol)) and	DERWENT EPO; JPO;	2004/10/30 09:56
_	,	food	DERWENT	
ļ	-	((antioxidant with thermal) and (vitamin or tocopherol)) and food	EPO; JPO; DERWENT	2004/10/30 09:57
-	111	((antioxidant with thermal) and (vitamin or tocopherol)) and	USPAT;	2004/10/30 11:08
-	23	food 44/\$.ccls. and (carotene or lycopene or leutin or betatene or	US-PGPUB	2004/10/20 11 00
		carotenoid)	USPAT; US-PGPUB	2004/10/30 11:08

* * *	* *	* *	* *	* * Welcome to STN International * * * * * * * * *					
NEWS	1			Web Page URLs for STN Seminar Schedule - N. America					
NEWS	2			"Ask CAS" for self-help around the clock					
NEWS	3	JUL	12	BEILSTEIN enhanced with new display and select options.					
NEWS	4	AUG	02	resulting in a closer connection to BABS IFIPAT/IFIUDB/IFICDB reloaded with new search and display					
NEWS	5	AUG	0.2	fields Chalus and Characterists					
				CAplus and CA patent records enhanced with European and Japan Patent Office Classifications					
NEWS	6	AUG	02	The Analysis Edition of STN Express with Discover!					
NEWS	7	אזזמ	27	(Version 7.01 for Windows) now available					
NEWS	7 8	AUG AUG		BIOCOMMERCE: Changes and enhancements to content coverage					
				BIOTECHABS/BIOTECHDS: Two new display fields added for legal status data from INPADOC					
NEWS				INPADOC: New family current-awareness alert (SDI) available					
NEWS	10	SEP	01	New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover!					
NEWS	11	SEP	01	New display format, HITSTR, available in WPIDS/WPINDEX/WPIX					
NEWS		SEP	27	STANDARDS will no longer be available on STN					
NEWS		SEP		SWETSCAN will no longer be available on STN					
NEWS	14	OCT	28	KOREAPAT now available on STN					
NEWS EXPRESS OCTOBER 29 CURRENT WINDOWS VERSION IS V7.01A, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004 NEWS HOURS STN Operating Hours Plus Help Desk Availability NEWS INTER General Internet Information NEWS LOGIN NEWS PHONE Direct Dial and Telecommunication Network Access to STN NEWS WWW CAS World Wide Web Site (general information) Enter NEWS followed by the item number or name to see news on that specific topic. All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may									
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FILE 'HOME' ENTERED AT 17:00:22 ON 29 OCT 2004									
			LDICE	D AT 17.00:22 ON 29 OCT 2004					
	=> file caplus COST IN U.S. DOLLARS SINCE FILE TOTAL								
COST II	v U.,	S, D(ЭμμΑΙ	OTHER THE TOTAL					
FULL ES	STIM	ATED	COS	ENTRY SESSION 0.21 0.21					
FILE 'CAPLUS' ENTERED AT 17:00:37 ON 29 OCT 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (AGE)									

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FILE COVERS 1907 - 29 Oct 2004 VOL 141 ISS 19
FILE LAST UPDATED: 28 Oct 2004 (20041028/ED)
```

FAN.CNT 10

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s fuel and (vitamin e or tocopherol)
         340874 FUEL
         154939 FUELS
         389767 FUEL
                  (FUEL OR FUELS)
         176528 VITAMIN
          49415 VITAMINS
         195026 VITAMIN
                  (VITAMIN OR VITAMINS)
        1802584 E
          28667 VITAMIN E
                  (VITAMIN(W)E)
          27205 TOCOPHEROL
           8044 TOCOPHEROLS
          29454 TOCOPHEROL
                  (TOCOPHEROL OR TOCOPHEROLS)
L1
             45 FUEL AND (VITAMIN E OR TOCOPHEROL)
=> s l1 and carotene
         27960 CAROTENE
         20157 CAROTENES
         38399 CAROTENE
                  (CAROTENE OR CAROTENES)
L_2
              2 L1 AND CAROTENE
=> d 12 1-2 all
     ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
Full Text
AN
     2003:334695 CAPLUS
    138:336957
    Entered STN: 02 May 2003
     Corn oil processing and products comprising corn oil and corn meal
     obtained from corn
    Jakel, Neal T.; Kotowski, Doug; Ingvalson, Joel; Beaver, Michael J.;
IN
    Ulrich, James F.; Amore, Francis; Tupy, Michael J.; Fox, Eugene J.;
     Patist, Alexander
PA
     Renessen, LLC, USA
    U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U.S. Ser. No. 927,836.
SO
     CODEN: USXXCO
DT
    Patent
LA
    English
    ICM C11C001-00
    ICS A21D002-00
    554010000; 554020000; 426622000
    17-9 (Food and Feed Chemistry)
    Section cross-reference(s): 18, 45, 51, 62
```

	PATENT NO.		KIND	DATE	APPLICATION NO.	DATE					
PI	US 20030835 US 6610867	512	A1 B2	20030501	US 2002-47725	20020115					
	US 20021936	517	A1	20030826 20021219	US 2001-927836	20010010					
	US 6648930		B2	20031118	05 2001-327636	20010810					
	US 20032244	196	A 1	20031204	US 2003-368521	20030218					
PRA	AI US 2000-637	7843	A2	20000810		20030218					
	US 2001-927		A2	20010810							
	US 1999-249		A2 A2	19990211							
CT N	US 2002-47725 CLASS			20020115							
PA	TENT NO.	CLASS	PATENT	FAMILY CLAS	SIFICATION CODES						
	2003083512	ICM ICS NCL	C11C001 A21D002	-00	00; 426622000						
US	2003083512	ECLA	1/18K; A23K001/18L2; A 01/10M; A23L001/105B; 9/00; C11B001/04; C11E 07/06; A23D009/007; A2	A23L001/30C; 3001/10; 3K001/00B2;							
US	A23K001/14; A23K001/16G; A23K001/16L; A23K001/18 A23D009/00; C11B001/10; C11B003/00B; C12P007/06; A23D009/007; A23J001/14C2; A23K001/00B2; A23K001/04; A23K110/; A23K001/10C; A23K001/14; A23K001/16G; A23K001/16L; A23K001/18; A23K001/18K; A23K001/18L2; A23K001/18N; A23K001/18S; A23L001/10M; A23L001/30C; B02B001/00; C08B030/10; C08L099/00; C11B001/04; C11B001/06										
US	2003224496	ECLA	A23K001, A23K001, A23K001, A23L001,	/04; A23K001 /16L; A23K00 /18N; A23K00 /30C; B02B00	9/007; A23J001/14C2; A 1/10; A23K001/10C; A23 01/18; A23K001/18K; A2 01/18S; A23L001/10M; A 01/00; C08B030/10; C08	K001/14; A23K; 3K001/18L2; 23L001/105; L099/00:					
AB	C11B001/04; C11B001/06; C11B001/10; C11B003/00B; C12P Corn oil and corn meal obtained from corn are included in useful products. The corn oil is extd. from the corn to form the corn meal. The corn grain process generally includes the steps of cracking corn grain having a total oil content of from about 3% to 30% by wt. and extg. the corn oil from the cracked corn grain. The corn oil is useful for making nutritionally enhanced edible oil or cooking oil, lubricants, biodiesel, fuel, cosmetics and oil-based or oil-contg. chem. products. The extd. corn meal is useful for making enhanced animal feed rations, snack food, blended										
Š.	food product	s, cost	netics, a	nd fermn. b	roth additive.	oa, prended					
ST	corn meal oi	l manui	f feed fo	od fuel cos	metic						
IT	Fats and Gly	ceridio	coils, b	iological s	tudies						
	RL: FFD (Foo	d or fe	eed use);	BIOL (Biol	ogical study); USES ([Jses)					
	(animal;	corn oi	l proces	sing and pr	oducts comprising corr	oil and corn					
ΙΤ	meal obta	inea fi	com corn)								
	-	rn oil	processi	ng and need	uata aomoniaine	41					
IT	(bars; corn oil processing and products comprising corn oil and corn meal obtained from corn) Diesel fuel substitutes (biodiesel; corn oil processing and products comprising corn oil and										
	corn meal	obtain	ed from	corn)	• • • • • • • • • • • • • • • • • • • •						
IT	Oryza sativa					•					
IT	(bran; corn oil processing and products comprising corn oil and corn meal obtained from corn)										
11	Bakery products Triticum aestivum										
	(byproducts; corn oil processing and products comprising corn oil and										
	corn meal obtained from corn)										

```
ΙT
      Solvent extraction
          (continuous; corn oil processing and products comprising corn oil and
          corn meal obtained from corn)
 IT
      Food viscosity
          (controls for; corn oil processing and products comprising corn oil and
         corn meal obtained from corn)
 ΙT
      Glutens
      RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
          (corn meal; corn oil processing and products comprising corn oil and
         corn meal obtained from corn)
 IT
      Acidity
      Air
      Antioxidants
      Biodegradable materials
      Bleaching
      Bread
      Breakfast cereal
      Canola
      Cottonseed
      Crosslinking agents
      Deodorization
      Dietary fiber
      Feed additives
      Feeding experiment
      Food additives
      Food processing
      Gallus domesticus
      Glycine max
      Helianthus annuus
      Herb
      Hordeum vulgare
      Micelles
      Nutrients
      Pigments, biological
     Rapeseed
     Rapeseed
     Solanum tuberosum
     Sorghum bicolor
     Spices
     Thickening agents
     Vinegar
     Zea mays
        (corn oil processing and products comprising corn oil and corn meal
        obtained from corn)
     Aldehydes, biological studies
     Anhydrides
     Epoxides
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (corn oil processing and products comprising corn oil and corn meal
        obtained from corn)
TT
     Amino acids, biological studies
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
        (corn oil processing and products comprising corn oil and corn meal
        obtained from corn)
     Canola oil
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
        (corn oil processing and products comprising corn oil and corn meal
        obtained from corn)
IT
     Carotenes, biological studies
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
```

(corn oil processing and products comprising corn oil and corn meal

```
obtained from corn)
     Enzymes, biological studies
IT
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
        (corn oil processing and products comprising corn oil and corn meal
        obtained from corn)
    Fats and Glyceridic oils, biological studies
IT
        obtained from corn)
```

- RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (corn oil processing and products comprising corn oil and corn meal
- IT Lipids, biological studies
 - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Mineral elements, biological studies RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- TΤ Olive oil RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Palm oil RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- TT Proteins RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- Safflower oil ITRL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Soybean oil RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Sterols RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- Sunflower oil RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Tocopherols RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- TΤ Vitamins RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT Corn oil RL: FFD (Food or feed use); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses) (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- ITFlours and Meals (corn; corn oil processing and products comprising corn oil and corn meal obtained from corn)
- ITBos taurus

(dairy cattle; corn oil processing and products comprising corn oil and corn meal obtained from corn) IT Vitamins RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (fat-sol.; corn oil processing and products comprising corn oil and corn meal obtained from corn) TΤ Flours and Meals (feather meal; corn oil processing and products comprising corn oil and corn meal obtained from corn) IT Aquaculture Bos taurus Equus caballus Poultry Sus scrofa domestica (feed for; corn oil processing and products comprising corn oil and corn meal obtained from corn) IT Catfish Tilapia (feeding; corn oil processing and products comprising corn oil and corn meal obtained from corn) IT (flour and meal; corn oil processing and products comprising corn oil and corn meal obtained from corn) IT Binders (for food; corn oil processing and products comprising corn oil and corn meal obtained from corn) IT Oryza sativa (hulls; corn oil processing and products comprising corn oil and corn meal obtained from corn) IT Beverages (low calorie; corn oil processing and products comprising corn oil and corn meal obtained from corn) IT (meal; corn oil processing and products comprising corn oil and corn meal obtained from corn) IT Bone meal Meat (meat-and-bone meal; corn oil processing and products comprising corn oil and corn meal obtained from corn) IT Triticum aestivum (middlings; corn oil processing and products comprising corn oil and corn meal obtained from corn) ITCooking (oils for; corn oil processing and products comprising corn oil and corn meal obtained from corn) IT (oilseed, meal; corn oil processing and products comprising corn oil and corn meal obtained from corn) TΤ Flours and Meals (oilseed; corn oil processing and products comprising corn oil and corn meal obtained from corn) IT Fats and Glyceridic oils, biological studies Fats and Glyceridic oils, biological studies RL: BUU (Biological use, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses) (partially hydrogenated; corn oil processing and products comprising corn oil and corn meal obtained from corn) IT Feed (pet; corn oil processing and products comprising corn oil and corn meal obtained from corn) IT (porridge; corn oil processing and products comprising corn oil and

corn meal obtained from corn)

IT Bran

(rice; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Food

(snack; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Beverages

(sports; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Fats and Glyceridic oils, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (stearins, oxy-; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Fuel oil

(substitutes; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT Feed

(swine; corn oil processing and products comprising corn oil and corn meal obtained from corn)

IT 7440-37-1, Argon, biological studies 7727-37-9, Nitrogen, biological studies

RL: BUU (Biological use, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(corn oil processing and products comprising corn oil and corn meal obtained from corn)

- 56-87-1, L-Lysine, biological studies 63-68-3, L-Methionine, biological TT 64-17-5, Ethanol, biological studies 67-63-0, Isopropyl alcohol, biological studies 73-22-3, L-Tryptophan, biological studies 77-92-9, Citric acid, biological studies 77-92-9D, Citric acid, monoglyceride derivs. 110-54-3, Hexane, biological studies Propyl gallate 123-28-4, Dilauryl thiodipropionate 128-37-0, BHT, biological studies 137-66-6, Ascorbyl palmitate 458-37-7, Curcumin 994-36-5, Sodium citrate 1107-26-2, β -Apo-8'-carotenal 6829-55-6, Tocotrienol 7235-40-7, β -Carotene 7647-14-5, Sodium chloride, biological studies 7664-38-2, Phosphoric acid, biological 9000-90-2, α -Amylase 9001-92-7, Protease 9005-25-8, Starch, biological studies 9016-00-6, Dimethyl polysiloxane 9032-08-0. Glucoamylase 25013-16-5, BHA 25395-66-8, Ascorbyl stearate 39413-05-3, Isopropyl citrate
 - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT 1393-63-1, Annatto
 - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (ext.; corn oil processing and products comprising corn oil and corn meal obtained from corn)
- IT 124-38-9, Carbon dioxide, biological studies
 - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (supercrit.; corn oil processing and products comprising corn oil and corn meal obtained from corn)
- L2 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

Full Text

- AN 1998:410640 CAPLUS
- DN 129:86023
- ED Entered STN: 04 Jul 1998
- TI Aerosol containing vitamin A or a derivative thereof
- IN Thoma, Karl; Rothenberger, Siegfried; Hein, Thomas
- PA Hermes Fabrik Pharmazeutischer Praeparate Franz Gradinger G.m.b.H. Co., Germany
- SO Eur. Pat. Appl., 7 pp.

```
CODEN: EPXXDW
 DT
      Patent
 LA
      German
 IC
      ICM A61K009-12
      ICS A61K031-07
 CC
      63-6 (Pharmaceuticals)
 FAN.CNT 1
      PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
      -----
                                            _____
                         ____
                                -----
 PI
      EP 848949
                          A1
                                19980624
                                          EP 1997-122419
                                                                  19971218
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
      DE 19652790
                        A1
                                19980625
                                            DE 1996-19652790
                                                                  19961218
 PRAI DE 1996-19652790
                                19961218
 CLASS
  PATENT NO.
                 CLASS PATENT FAMILY CLASSIFICATION CODES
                        EP 848949
                 ICM
                        A61K009-12
                 ICS
                        A61K031-07
     Vitamin A-contg. pharmaceutical aerosols for use on the respiratory tract
     mucosa are provided for treatment of disorders affecting the respiratory
      epithelium, e.g. neoplasms, metastases, squamous metaplasia, bronchitis,
     and newborn bronchopulmonary dysplasia. These compns. contain satd.
     hydrocarbons as solubilizers to improve the aerosolization of the active
      agent. At low concns., these hydrocarbons do not display the
      flammability, toxicity, and unpleasant flavor seen at higher concns.
     Thus, an aerosol prepn. contained retinol palmitate 1.10,
     DL-\alpha-tocopherol 0.11, tetrafluoroethane 76.71, and isobutane 22.08
     wt.%.
     vitamin A solubilizer hydrocarbon aerosol; inhalant retinol solubilizer
 ST
     isobutane
IT
     Antitumor agents
     Propellants (fuels)
     Solubilizers
        (aerosol contg. vitamin A or deriv. thereof)
     Carotenes, biological studies
     Retinoids
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
        (aerosol contg. vitamin A or deriv. thereof)
TТ
     Hydrocarbons, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (aerosol contg. vitamin A or deriv. thereof)
IT
     Bronchi
        (bronchitis; aerosol contg. vitamin A or deriv. thereof)
IT
     Newborn
        (bronchopulmonary dysplasia in; aerosol contg. vitamin A or deriv.
        thereof)
IT
     Lung, disease
        (bronchopulmonary dysplasia, in newborn; aerosol contg. vitamin A or
        deriv. thereof)
IT
     Bronchi
     Bronchi
        (carcinoma; aerosol contg. vitamin A or deriv. thereof)
IT
     Respiratory tract
        (ciliated epithelium, disorder; aerosol contg. vitamin A or deriv.
        thereof)
IT
    Epithelium
        (ciliated, respiratory tract, disorder; aerosol contg. vitamin A or
       deriv. thereof)
IT
    Mucous membrane
```

```
Mucous membrane
          (disease; aerosol contg. vitamin A or deriv. thereof)
 IT
      Cell differentiation
          (disorder, of tracheobronchial tract; aerosol contg. vitamin A or
         deriv. thereof)
 TT
      Poisons, nonbiological source
          (gaseous, tracheobronchial epithelium damage from; aerosol contg.
         vitamin A or deriv. thereof)
 IT
      Drug delivery systems
          (inhalants; aerosol contg. vitamin A or deriv. thereof)
      Bronchi
      Trachea (anatomical)
      Trachea (anatomical)
          (mucosa, disease; aerosol contg. vitamin A or deriv. thereof)
      Respiratory tract
      Respiratory tract
         (mucosa; aerosol contg. vitamin A or deriv. thereof)
 IT
         (mucous, disorder; aerosol contg. vitamin A or deriv. thereof)
 TT
      Mucous membrane
      Mucous membrane
         (respiratory tract; aerosol contg. vitamin A or deriv. thereof)
 ΤT
      Epithelium
         (squamous, disease, metaplasia; aerosol contg. vitamin A or deriv.
         thereof)
     Mucous membrane
      Mucous membrane
         (trachea, disease; aerosol contg. vitamin A or deriv. thereof)
IT
     Dust
         (tracheobronchial epithelium damage from; aerosol contg. vitamin A or
        deriv. thereof)
IT
      68-26-8, Retinol
                       68-26-8D, Retinol, esters 79-81-2, Retinol palmitate
     302-79-4, Retinoic acid 302-79-4D, Retinoic acid, esters
                                                                   7235-40-7,
     β-Carotene
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
      (Uses)
        (aerosol contg. vitamin A or deriv. thereof)
     74-98-6, Propane, biological studies 75-28-5, Isobutane 106-97-8,
     n-Butane, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (solubilizer; aerosol contg. vitamin A or deriv. thereof)
RE.CNT 3
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Boehringer Ingelheim Int; WO 9111496 A CAPLUS
(2) Glaxo Group Ltd; WO 9311743 A CAPLUS
(3) Gradinger F Hermes Pharma; EP 0352412 A CAPLUS
=> s grain or fescue or clover or wheat or barley or oats or rye or sorghum or flax or tritica
        273768 GRAIN
        131456 GRAINS
        352360 GRAIN
                 (GRAIN OR GRAINS)
          3505 FESCUE
            50 FESCUES
          3514 FESCUE
                 (FESCUE OR FESCUES)
        14319 CLOVER
          501 CLOVERS
        14442 CLOVER
                 (CLOVER OR CLOVERS)
```

```
114091 WHEAT
    2769 WHEATS
  114186 WHEAT
           (WHEAT OR WHEATS)
   46763 BARLEY
     896 BARLEYS
  46815 BARLEY
           (BARLEY OR BARLEYS)
  13185 OATS
  15109 RYE
     62 RYES
  15120 RYE
           (RYE OR RYES)
  13119 SORGHUM
    343 SORGHUMS
  13147 SORGHUM
           (SORGHUM OR SORGHUMS)
   8663 FLAX
     17 FLAXES
   8668 FLAX
          (FLAX OR FLAXES)
   1923 TRITICALE
    126 TRITICALES
   1931 TRITICALE
          (TRITICALE OR TRITICALES)
  77622 RICE
    461 RICES
  77638 RICE
          (RICE OR RICES)
      4 TRITICALE RICE
          (TRITICALE (W) RICE)
 111199 CORN
    345 CORNS
111319 CORN
          (CORN OR CORNS)
    442 SPELT
    70 SPELTS
   502 SPELT
          (SPELT OR SPELTS)
  5204 MILLET
   206 MILLETS
  5246 MILLET
          (MILLET OR MILLETS)
  2537 AMARANTH
    25 AMARANTHS
  2547 AMARANTH
         (AMARANTH OR AMARANTHS)
  3511 BUCKWHEAT
    12 BUCKWHEATS
  3513 BUCKWHEAT
         (BUCKWHEAT OR BUCKWHEATS)
   566 QUINOA
    1 QUINOAS
   567 QUINOA
         (QUINOA OR QUINOAS)
    10 KAMUT
  2335 TEFF
    9 TEFFS
  2339 TEFF
         (TEFF OR TEFFS)
609809 GRAIN OR FESCUE OR CLOVER OR WHEAT OR BARLEY OR OATS OR RYE OR
```

SORGHUM OR FLAX OR TRITICALE RICE OR CORN OR SPELT OR MILLET OR

L3

AMARANTH OR BUCKWHEAT OR QUINOA OR KAMUT OR TEFF

```
=> 3 and (carotene or carotenoid or lycopene lutein or betatene)
 3 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
 "HELP COMMANDS" at an arrow prompt (=>).
=> s 13 and (carotene or carotenoid or lycopene lutein or betatene)
          27960 CAROTENE
          20157 CAROTENES
          38399 CAROTENE
                  (CAROTENE OR CAROTENES)
          17279 CAROTENOID
          22985 CAROTENOIDS
          27802 CAROTENOID
                  (CAROTENOID OR CAROTENOIDS)
           4100 LYCOPENE
             53 LYCOPENES
           4110 LYCOPENE
                  (LYCOPENE OR LYCOPENES)
          5027 LUTEIN
            36 LUTEINS
          5036 LUTEIN
                  (LUTEIN OR LUTEINS)
            84 LYCOPENE LUTEIN
                 (LYCOPENE (W) LUTEIN)
            13 BETATENE
        · 4094 L3 AND (CAROTENE OR CAROTENOID OR LYCOPENE LUTEIN OR BETATENE)
\Rightarrow s l4 and (vegetable oil or meadowfoam or peanut or cottonseed or rapeseed or rape seed or m
         74343 VEGETABLE
         24529 VEGETABLES
         85891 VEGETABLE
                 (VEGETABLE OR VEGETABLES)
        688257 OIL
        329781 OILS
        775486 OIL
                 (OIL OR OILS)
         18323 VEGETABLE OIL
                 (VEGETABLE (W) OIL)
          162 MEADOWFOAM
        20918 PEANUT
         4944 PEANUTS
        22197 PEANUT
                 (PEANUT OR PEANUTS)
        16294 COTTONSEED
          428 COTTONSEEDS
        16373 COTTONSEED
                 (COTTONSEED OR COTTONSEEDS)
         8261 RAPESEED
          183 RAPESEEDS
         8302 RAPESEED
                (RAPESEED OR RAPESEEDS)
        17950 RAPE
           67 RAPES
        17964 RAPE
                (RAPE OR RAPES)
       123220 SEED
        86209 SEEDS
       165907 SEED
```

(SEED OR SEEDS)

```
2185 RAPE SEED
                   (RAPE (W) SEED)
            651 MACADAMIA
              3 MACADAMIAS
            651 MACADAMIA
                   (MACADAMIA OR MACADAMIAS)
           2573 AVOCADO
            343 AVOCADOS
           2629 AVOCADO
                  (AVOCADO OR AVOCADOS)
          14682 PALM
           1143 PALMS
          15071 PALM
                  (PALM OR PALMS)
          30243 CASTOR
             15 CASTORS
          30255 CASTOR
                  (CASTOR OR CASTORS)
L5
            316 L4 AND (VEGETABLE OIL OR MEADOWFOAM OR PEANUT OR COTTONSEED OR
                RAPESEED OR RAPE SEED OR MACADAMIA OR AVOCADO OR PALM OR CASTOR)
=> s 15 and (thermal or heat?)
         954571 THERMAL
            66 THERMALS
         954600 THERMAL
                  (THERMAL OR THERMALS)
       2156456 HEAT?
L6
            36 L5 AND (THERMAL OR HEAT?)
=> d 16 1-36 ti
     ANSWER 1 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
     Production method for particles containing lipophilic compounds, and
TI
     apparatus therefor
L6
     ANSWER 2 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI
     Edible fat emulsions as food spreads.
L6
     ANSWER 3 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
TI
     \beta, \beta-Carotene and 2,2,4-trimethyl-6-ethoxy-1,2-dihydroquinoline
     mixtures as diesel fuel stabilizers and cetane improvers
     ANSWER 4 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
L6
    A strong constitutive promoter from the parsley ubiquitin gene and its use
ΤI
     in expression of foreign genes in plants
1.6
    ANSWER 5 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
ΤI
    Cosmetic compositions comprising silicone gels
L6
    ANSWER 6 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
    Cosmetic compositions comprising silicone gels comprising entrapped,
    occluded or encapsulated pigments
    ANSWER 7 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
    Optothermal window method for on-line monitoring of decay kinetics of
    trans-\beta-carotene in thermally treated vegetable oils
    ANSWER 8 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
    Purification and characterization of an autoclavable superoxide dismutase
    (SOD) isozyme from Potentilla atrosanguinea, and use of the SOD in
    cosmetic, food and pharmaceutical compositions
```

- L6 ANSWER 9 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Fast quality screening of **vegetable oils** by HPLC-thermal lens spectrometric detection
- L6 ANSWER 10 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Process for producing carotenoid emulsion
- L6 ANSWER 11 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- Ultrasensitive assays of trans- and cis- β -carotenes in vegetable oils by high-performance liquid chromatography-thermal lens detection
- L6 ANSWER 12 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Unsaponifiables-enriched vegetable oil as food ingredient
- L6 ANSWER 13 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Encapsulation of sensitive liquid components into a matrix to obtain discrete shelf-stable particles
- L6 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Nutrient intensified oil and its preparing process
- L6 ANSWER 15 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Diurnal changes of photooxidation response in leaves of C3 and C4 plants
- L6 ANSWER 16 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Effect of traditional processing practices on the content of total carotenoid, β -carotene, α -carotene and vitamin A activity of selected Tanzanian vegetables
- L6 ANSWER 17 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Detection of process components in food process streams by fluorescence
- L6 ANSWER 18 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Compositions containing water-soluble hemicellulose and natural resins
- L6 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Carotene removal from corn meal
- L6 ANSWER 20 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Process of obtaining the sea buckthorn oil "aska-tesh"
- L6 ANSWER 21 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Cream cheese type food
- L6 ANSWER 22 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Rapeseed meal in the diet of common carp reared in heated waters. V. Carotenoids in diets and fish tissues
- L6 ANSWER 23 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Low fat comestible spread
- L6 ANSWER 24 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Stable clear liquid release agent
- L6 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI The preparation of water-soluble powdered $\beta\text{--carotene}$ and its preservation stability
- L6 ANSWER 26 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Fixing lipophilic substances on starch, starch derivatives, or materials containing them

- L6 ANSWER 27 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Suitability of some Egyptian clays for bleaching cottonseed oil. III. Regeneration of spent clays
- L6 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Margarine oil compositions
- L6 ANSWER 29 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Preparation of β -carotene
- L6 ANSWER 30 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Stabilized carotene composition
- L6 ANSWER 31 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Synthesis of carotene homologs
- L6 ANSWER 32 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI δ -Tocopherol. I. Isolation from soybean oil and properties
- L6 ANSWER 33 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Chemical estimation of vitamin E in vegetable oils
- L6 ANSWER 34 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Stabilizing cottonseed oil or other glyceridic oils against oxidative deterioration
- L6 ANSWER 35 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Improving the quality of milk
- L6 ANSWER 36 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- TI Stabilizing fats and oils against rancidity
- => d 16 7 10 23 24 all
- L6 ANSWER 7 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
- Full Text
- AN 2003:540724 CAPLUS
- DN 139:349781
- ED Entered STN: 15 Jul 2003
- TI Optothermal window method for on-line monitoring of decay kinetics of trans- β -carotene in thermally treated vegetable oils
- AU Ganguli, Otto; Bicanic, Dane; Bonifacic, Marija; Nicoli, Maria Cristina; Chirtoc, Mihai
- CS Agrotechnology and Food Sciences, Division of Biophysics, Laser Laboratory for Photoacoustic and Photothermal Research, Wageningen University and Research Centre, Wageningen, 6703 HA, Neth.
- SO European Food Research and Technology (2003), 217(1), 74-79 CODEN: EFRTFO; ISSN: 1438-2377
- PB Springer-Verlag
- DT Journal
- LA English
- CC 17-1 (Food and Feed Chemistry)
- The optothermal window detection method at 488 nm was used to monitor online the concn. of trans- β -carotene that was added to several vegetable oils after treating them at 200° in the presence of air for varying amts. of time. Results obtained for extra virgin oil show a direct proportionality between the rate const. describing the disappearance of trans- β -carotene and the duration of thermal treatment. The rate const. for the decay of trans- β -carotene in oils treated under identical conditions was also dependent on the type of oil. Trends and individual data are discussed in the light of a possible

```
application of the method for the detn. of the oxidative stability of
       vegetable oils.
  ST
       vegetable oil carotene optothermal window photoacoustic spectroscopy
  IT
       Olive oil
       RL: AMX (Analytical matrix); ANST (Analytical study)
          (extra virgin; optothermal window method for online monitoring of decay
          kinetics of trans-\beta-carotene in thermally treated
          vegetable oils)
  IT
       Photoacoustic spectroscopy
       Reaction kinetics
          (optothermal window method for online monitoring of decay kinetics of
          trans-\beta-carotene in thermally treated vegetable
          oils)
       Corn oil
       Safflower oil
       Sunflower oil
       RL: AMX (Analytical matrix); ANST (Analytical study)
          (optothermal window method for online monitoring of decay kinetics of
          trans-\beta\text{-carotene} in thermally treated \textbf{vegetable}
          oils)
 IT
      Fats and Glyceridic oils, analysis
      RL: AMX (Analytical matrix); ANST (Analytical study)
          (vegetable; optothermal window method for online monitoring of decay
         kinetics of trans-\beta-carotene in thermally treated
         vegetable oils)
      7235-40-7, \beta, \beta-Carotene
 IT
      RL: ANT (Analyte); ANST (Analytical study)
         (optothermal window method for online monitoring of decay kinetics of
         trans-\beta-carotene in thermally treated vegetable
         oils)
 RE.CNT
         14
               THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Bicanic, D; Appl Spectrosc 1995, V49, P1485 CAPLUS
 (2) Chen, B; J Agric Food Chem 1994, V42, P2391 CAPLUS
 (3) Doka, O; Anal Chem 2002, V74, P2157 CAPLUS
 (4) Halliwell, B; Crit Rev Food Sci 1995, V35, P7 CAPLUS
 (5) Helander, P; Meas Sci Technol 1993, V4, P178
 (6) Henry, L; J Am Oil Chem Soc 1998, V75, P823 CAPLUS
 (7) Labuza, T; J Am Oil Chem Soc 1969, V46, P409 CAPLUS
 (8) Loliger, J; J Sci Food Agric 1990, V52, P119
 (9) Matthaus, B; J Am Oil Chem Soc 1996, V73, P1039 CAPLUS
 (10) McQueen, D; Anal Chem 1995, V14, P482 CAPLUS
 (11) Minguez-Mosquera, M; J Sci Food Agric 1995, V67, P153
 (12) Pagano, T; Rev Ing Quim 1999, V15, P11
 (13) Pellegrini, N; J Agric Food Chem 2001, V49, P2532 CAPLUS
 (14) Steenson, D; J Am Oil Chem Soc 2000, V77, P153
L6
     ANSWER 10 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
Full Text
     2002:556118 CAPLUS
AN
     137:108618
DN
ED
     Entered STN: 26 Jul 2002
ΤI
     Process for producing carotenoid emulsion
IN
     Mori, Toshiki; Mimura, Satoshi; Nakatani, Tomonari
     Kuraray Co., Ltd., Japan
     U.S. Pat. Appl. Publ., 10 pp.
     CODEN: USXXCO
DT
     Patent
LA
     English
IC
     ICM C09K003-00
NCL 516073000
     17-4 (Food and Feed Chemistry)
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Section cross-reference(s): 63 FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ____ ---------------US 2002099102 A1 20020725 US 2002-52456 20020123 US 6664300 B2 20031216 EP 1227082 A1 20020731 EP 2002-166 20020108 EP 1227082 B1 20040616 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR AT 269301 E 20040715 AT 2002-166 20020108 CN 1367167 A 20020904 CN 2002-100969 20020110 JP 2002302479 A2 20021018 JP 2002-13194 20020122 JP 2002316924 A2 20021031 JP 2002-13195 20020122 PRAI JP 2001-15267 Α 20010124 JP 2001-15274 Α 20010124 CLASS PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES ----US 2002099102 ICM C09K003-00 NCL 516073000 US 2002099102 ECLA C07C175/00B Disclosed is a process for producing a carotenoid emulsion which comprises heating a suspension of the carotenoid in a high boiling org. liq., by passing the suspension through a conduit of 0.1 to 50 mm inside diam. heated to temp. at 120-700° for a residence time of 0.05 to 5 s or by mixing the suspension with a high boiling org. liq. heated to the range of 120 to 500° for a time of 0.05 to 10 s, to dissolve the carotenoid, and then immediately adding the resulting soln. into an aq. soln. of an emulsifier to emulsify the soln. By this prodn. process, an emulsion contg. a carotenoid as an effective ingredient can be produced with the carotenoid maintaining a high total trans-form proportion, with good productivity, conveniently, and industrially advantageously. ST carotenoid emulsion prodn process Fatty acids, biological studies IT RL: FFD (Food or feed use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (C16-18, esters with sucrose, emulsifiers; process for producing carotenoid emulsion) IT Fatty acids, biological studies RL: FFD (Food or feed use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (C8-14, esters with sucrose, emulsifiers; process for producing carotenoid emulsion) Fatty acids, biological studies ΙT RL: FFD (Food or feed use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (castor-oil, esters with sorbitan, emulsifiers; process for producing carotenoid emulsion) IT Alkali metal compounds RL: FFD (Food or feed use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(emulsifiers; process for producing carotenoid emulsion)

use); BIOL (Biological study); PROC (Process); USES (Uses)

RL: FFD (Food or feed use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic

Fatty acids, biological studies

```
(esters, emulsifiers, of ascorbic acid and sorbitan; process for
         producing carotenoid emulsion)
 TТ
      Corn oil
      Diglycerides
      Edible oils
      Glycerides, biological studies
      Monoglycerides
      Paraffin oils
      Terpenes, biological studies
      RL: FFD (Food or feed use); PEP (Physical, engineering or chemical
      process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological
      study); PROC (Process); USES (Uses)
         (high boiling org. liq.; process for producing carotenoid
         emulsion)
 TT
      Antioxidants
      Emulsifying agents
      Emulsions
         (process for producing carotenoid emulsion)
 ידיד
      Carotenes, biological studies
      RL: FFD (Food or feed use); PEP (Physical, engineering or chemical
      process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological
      study); PROC (Process); USES (Uses)
         (process for producing carotenoid emulsion)
      Fatty acids, biological studies
      RL: FFD (Food or feed use); MOA (Modifier or additive use); PEP (Physical,
      engineering or chemical process); PYP (Physical process); THU (Therapeutic
      use); BIOL (Biological study); PROC (Process); USES (Uses)
         (tall-oil, esters with sorbitan, emulsifiers; process for producing
         carotenoid emulsion)
     137-66-6, Ascorbic acid palmitate 1310-73-2, Sodium hydroxide,
IT
     biological studies
     RL: FFD (Food or feed use); MOA (Modifier or additive use); PEP (Physical,
     engineering or chemical process); PYP (Physical process); THU (Therapeutic
     use); BIOL (Biological study); PROC (Process); USES (Uses)
         (emulsifiers; process for producing carotenoid emulsion)
IT
     25496-72-4, Monoolein
     RL: FFD (Food or feed use); PEP (Physical, engineering or chemical
     process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological
     study); PROC (Process); USES (Uses)
         (high boiling org. liq.; process for producing carotenoid
        emulsion)
     472-61-7, Astaxanthin 472-70-8, Cryptoxanthin
IT
                                                        514-78-3, Canthaxanthin
     3604-90-8, Citranaxanthin 7235-40-7, \beta-Carotene
     12676-20-9, Apocarotenal
     RL: FFD (Food or feed use); PEP (Physical, engineering or chemical
     process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological
     study); PROC (Process); USES (Uses)
        (process for producing carotenoid emulsion)
L6
     ANSWER 23 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
Full Text
AN
     1982:508798 CAPLUS
     97:108798
     Entered STN: 12 May 1984
     Low fat comestible spread
     Miller, Donald E.; Werstak, Charles E.
IN
     SCM Corp. , USA
PA
SO
     Eur. Pat. Appl., 21 pp.
     CODEN: EPXXDW
DT
     Patent
LΑ
     English
TC
     A23D003-00; A23L001-24; A23C020-00
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CC 17-9 (Food and Feed Chemistry)
 FAN.CNT 1
      PATENT NO.
                         KIND
                                DATE
                                          APPLICATION NO.
                                                                DATE
      -----
                               _____
                         ----
                                                                 -----
      EP 49705
                          A1
                                19820421
                                         EP 1980-106140
                                                                 19801009
         R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE
 PRAI EP 1980-106140
                               19801009
 CLASS
  PATENT NO.
              CLASS PATENT FAMILY CLASSIFICATION CODES
  -----
                        EP 49705 IC
                       A23D003-00IC A23L001-24IC
                                                       A23C020-00
     An oil-in-water emulsion suitable for use in the prodn. of low-fat analogs
      of margarine, mayonnaise, or cheese is prepd. from an emulsifier, a
      thickening agent, a fat with a Wiley m.p. of 24-41° and a solid fat
      index at 35.5° of ≤20 and at 37.5° essentially zero,
      and optionally flavoring and coloring agents. Thus, water (68.31%) was
     mixed with Methocel K-100M (hydroxypropylmethyl cellulose) [9004-65-3]
      (0.5%), Avicel RC 581 (cellulose prepn.) [51395-75-6] (0.5%), and
     \beta\text{-carotene} (0.09%) with heat; Dur-em 114 emulsifier
      (monoglycerides) (4.0%), dewaxed corn oil (11.25%), hydrogenated
     cottonseed-soybean oil (13.75%), and artificial butter flavor (0.1%)
     were added; the material was homogenized at 1000-2000 psig; salt was
     added; and the emulsion was cooled, yielding a margarine-like product.
     emulsion food fat; margarine fat low emulsion; cheese substitute emulsion;
ST
     mayonnaise substitute emulsion
TТ
     Soybean oil
     RL: BIOL (Biological study)
        (cottonseed oil mixt. with, hydrogenated, food fat-low
        emulsion contg.)
     Butter substitutes
     Cheese substitutes
     Margarine
        (fat-low, emulsion for)
IΤ
     Corn oil
     RL: BIOL (Biological study)
        (food fat-low emulsion contq.)
IT
     Cottonseed oil
     RL: BIOL (Biological study)
        (soybean oil mixt. with, hydrogenated, food fat-low emulsion contg.)
IT
     Mayonnaise
       (substitutes, fat-low, emulsion for)
IT
     Food
        (emulsions, fat-low, manuf. of)
     Glycerides, biological studies
IT
     RL: BIOL (Biological study)
        (mono-, in food fat-low emulsion manuf.)
     9004-32-4 9004-65-3 51395-75-6
IT
     RL: BIOL (Biological study)
        (in food fat-low emulsion manuf.)
IT
     9004-34-6, biological studies
     RL: BIOL (Biological study)
        (microcryst., in food fat-low emulsion manuf.)
L6
    ANSWER 24 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
Full Text
    1980:406377 CAPLUS
ΑN
DN
    93:6377
    Entered STN: 12 May 1984
ED
ΤI
    Stable clear liquid release agent
    Hanson, Harold W., Sr.
IN
PΑ
    Par-Way Mfg. Co., USA
SO
    U.S., 4 pp. Cont.-in-part of U.S. Ser. No. 532,850. abandoned.
```

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CODEN: USXXAM
 DT
      Patent.
 LA
     English
 IC
      A23D005-00
 NCL 426250000
 CC
      17-2 (Foods)
 FAN.CNT 2
      PATENT NO.
                        KIND DATE
                                           APPLICATION NO.
                                                                  DATE
                        ____
                                                                -----
      US 4192898
                         A 19800311
                                         US 1978-916116
                                                                 19780616
      US 4096258
                         A 19780620
                                           US 1977-772929
                                                                 19770228
 PRAI US 1974-532850
                               19741216
      US 1975-621309
                               19751010
      US 1977-772929
                               19770228
 CLASS
  PATENT NO.
                 CLASS PATENT FAMILY CLASSIFICATION CODES
  ------
                        US 4192898
                 IC
                        A23D005-00
                 NCL
                        426250000
     A stable clear pan release agent consists of 0.25-2% by wt. Polysorbate 80
      [9005-65-6] in a mixt. of 2 or more oils, the major oil being liq. at room
      temp., and the minor one being solid at room temp. The oils are agitated
     at ~74°, rapidly chilled and worked to at least 25°;
     worked at that temp., and combined with CO2 propellant to yield an aerosol
     product. Thus, about half of 2675 lb soybean oil and 1784 lb coconut oil
     were heated and mixed to 70°, the immersion heaters were cut
     off, 240 lb double-bleached lecithin was mixed in for 10 min, the balance
     of the soybean and coconut oils was added followed by 36.9 lb Polysorbate
     80, 2.4 lb BEX butter deriv., and 3.8 or \beta\text{-carotene} . The batch was
     mixed for 3 min, cooled to ~60°, and passed through a 2-stage
     homogenizer (1000 and 3500 psi, resp.), and cooled to ~38°.
     The blend was agitated rapidly in a Votator while chilling to
     ~21°, and then worked with a high-speed paddle mixer. The
     product was clear and brilliant.
ST
     pan release agent; cooking utensil release agent
IT
     Coconut oil
       Corn oil
       Cottonseed oil
     Lecithins, biological studies
       Peanut oil
     Soybean oil
     RL: BIOL (Biological study)
        (of cooking utensil release agents)
IT
     Oils
     RL: BIOL (Biological study)
        (palm kernel, of cooking utensil release agents)
IT
     Oils
     RL: BIOL (Biological study)
        (palm, of cooking utensil release agents)
IT
     Cooking utensils
        (release agents for)
IT
     637-12-7 9005-65-6
     RL: BIOL (Biological study)
        (of cooking utensil release agents)
IT
    124-38-9, uses and miscellaneous
    RL: USES (Uses)
        (propellant, for aerosol cooking utensil release agents)
=> d his
```

(FILE 'HOME' ENTERED AT 17:00:22 ON 29 OCT 2004)

```
FILE 'CAPLUS' ENTERED AT 17:00:37 ON 29 OCT 2004
 L1
               45 S FUEL AND (VITAMIN E OR TOCOPHEROL)
 L2
               2 S L1 AND CAROTENE
           609809 S GRAIN OR FESCUE OR CLOVER OR WHEAT OR BARLEY OR OATS OR RYE O
 L3
            4094 S L3 AND (CAROTENE OR CAROTENOID OR LYCOPENE LUTEIN OR BETATENE
 L4
             316 S L4 AND (VEGETABLE OIL OR MEADOWFOAM OR PEANUT OR COTTONSEED O
              36 S L5 AND (THERMAL OR HEAT?)
 => s 15 and (vitamin e or tocopherol)
         176528 VITAMIN
          49415 VITAMINS
         195026 VITAMIN
                  (VITAMIN OR VITAMINS)
        1802584 E
          28667 VITAMIN E
                  (VITAMIN(W)E)
          27205 TOCOPHEROL
           8044 TOCOPHEROLS
          29454 TOCOPHEROL
                  (TOCOPHEROL OR TOCOPHEROLS)
            107 L5 AND (VITAMIN E OR TOCOPHEROL)
 => s 17 and diesel
          40979 DIESEL
           423 DIESELS
          41029 DIESEL
                 (DIESEL OR DIESELS)
L_8
              1 L7 AND DIESEL
=> d 18 all
    ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN
L_8
Full Text
AN 2003:334695 CAPLUS
    138:336957
ED Entered STN: 02 May 2003
TI
     Corn oil processing and products comprising corn oil and corn meal
     obtained from corn
     Jakel, Neal T.; Kotowski, Doug; Ingvalson, Joel; Beaver, Michael J.;
     Ulrich, James F.; Amore, Francis; Tupy, Michael J.; Fox, Eugene J.;
     Patist, Alexander
PΑ
     Renessen, LLC, USA
     U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U.S. Ser. No. 927,836.
     CODEN: USXXCO
DT
     Patent
LA
     English
     ICM C11C001-00
     ICS A21D002-00
NCL 554010000; 554020000; 426622000
     17-9 (Food and Feed Chemistry)
     Section cross-reference(s): 18, 45, 51, 62
FAN.CNT 10
     PATENT NO.
                        KIND DATE
                                            APPLICATION NO.
                                                                   DATE
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                                            ______
                                _____
    US 2003083512
                                20030501
                        A1
                                            US 2002-47725
                                                                    20020115
                     B2 20030826
A1 20021219
B2 20031118
     US 6610867
     US 2002193617
                                            US 2001-927836
                                                                    20010810
    US 6648930 B2 20031204
US 2003224496 A1 20031204
US 2000-637843 A2 20000810
US 2001-927836 A2 20010810
                                            US 2003-368521
                                                                    20030218
PRAI US 2000-637843
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US 1999-249280
                        A2
                                19990211
      US 2002-47725
                          A2
                                20020115
 CLASS
  PATENT NO.
                  CLASS PATENT FAMILY CLASSIFICATION CODES
                 _____
  ______
  US 2003083512
                 ICM
                        C11C001-00
                  ICS
                        A21D002-00
                 NCL
                        554010000; 554020000; 426622000
  US 2003083512
                 ECLA
                        A23D009/00; A23K001/18K; A23K001/18L2; A23K001/18N;
                        A23K001/18S; A23L001/10M; A23L001/105B; A23L001/30C;
                        C08B030/10; C08L099/00; C11B001/04; C11B001/10;
                        C11B003/00B; C12P007/06; A23D009/007; A23K001/00B2;
                        A23K001/14; A23K001/16G; A23K001/16L; A23K001/18
  US 2002193617
                 ECLA
                        A23D009/00; C11B001/10; C11B003/00B; C12P007/06;
                        A23D009/007; A23J001/14C2; A23K001/00B2; A23K001/04;
                        A23K110/; A23K001/10C; A23K001/14; A23K001/16G;
                        A23K001/16L; A23K001/18; A23K001/18K; A23K001/18L2;
                        A23K001/18N; A23K001/18S; A23L001/10M; A23L001/30C;
                        B02B001/00; C08B030/10; C08L099/00; C11B001/04;
                        C11B001/06
 US 2003224496
                        A23D009/00; A23D009/007; A23J001/14C2; A23K001/00B2;
                ECLA
                        A23K001/04; A23K001/10; A23K001/10C; A23K001/14; A23K;
                        A23K001/16L; A23K001/18; A23K001/18K; A23K001/18L2;
                        A23K001/18N; A23K001/18S; A23L001/10M; A23L001/105;
                        A23L001/30C; B02B001/00; C08B030/10; C08L099/00;
                        C11B001/04; C11B001/06; C11B001/10; C11B003/00B; C12P
AB
     Corn oil and corn meal obtained from corn are included in useful
     products. The corn oil is extd. from the corn to form the corn
     meal. The corn grain process generally includes the steps of cracking
     corn grain having a total oil content of from about 3% to 30% by wt.
     and extg. the corn oil from the cracked corn grain. The corn oil
     is useful for making nutritionally enhanced edible oil or cooking oil,
     lubricants, biodiesel, fuel, cosmetics and oil-based or oil-contg. chem.
     products. The extd. corn meal is useful for making enhanced animal feed
     rations, snack food, blended food products, cosmetics, and fermn. broth
     additive.
ST
     corn meal oil manuf feed food fuel cosmetic
     Fats and Glyceridic oils, biological studies
IT
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
        (animal; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
ŤΤ
     Food
        (bars; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
IT
     Diesel fuel substitutes
        (biodiesel; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
IT
     Oryza sativa
        (bran; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
IT
    Bakery products
     Triticum aestivum
        (byproducts; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
IT
    Solvent extraction
        (continuous; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
IT
    Food viscosity
        (controls for; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
IT
    RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
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```
(corn meal; corn oil processing and products
          comprising corn oil and corn meal obtained from
          corn)
 IT
      Acidity
       Air
      Antioxidants
      Biodegradable materials
      Bleaching
      Bread
      Breakfast cereal
      Canola
        Cottonseed
      Crosslinking agents
      Deodorization
      Dietary fiber
      Feed additives
      Feeding experiment
      Food additives
      Food processing
      Gallus domesticus
      Glycine max
      Helianthus annuus
      Herb
      Hordeum vulgare
      Micelles
      Nutrients
      Pigments, biological
        Rapeseed
        Rapeseed
      Solanum tuberosum
        Sorghum bicolor
      Spices
     Thickening agents
     Vinegar
     Zea mays
         (corn oil processing and products comprising corn
         oil and corn meal obtained from corn)
     Aldehydes, biological studies
     Anhydrides
     Epoxides
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
         (corn oil processing and products comprising corn
        oil and corn meal obtained from corn)
IT
     Amino acids, biological studies
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
        (corn oil processing and products comprising corn
        oil and corn meal obtained from corn)
IT
     Canola oil
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
        (corn oil processing and products comprising corn
        oil and corn meal obtained from corn)
     Carotenes, biological studies
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
        (corn oil processing and products comprising corn
        oil and corn meal obtained from corn)
    Enzymes, biological studies
IT
    RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
        ({\tt corn}\ {\tt oil}\ {\tt processing}\ {\tt and}\ {\tt products}\ {\tt comprising}\ {\tt corn}
        oil and corn meal obtained from corn)
    Fats and Glyceridic oils, biological studies
    RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
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(corn oil processing and products comprising corn
         oil and corn meal obtained from corn)
      Lipids, biological studies
      RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
          (corn oil processing and products comprising corn
         oil and corn meal obtained from corn)
      Mineral elements, biological studies
 IT
      RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
          (corn oil processing and products comprising corn
         oil and corn meal obtained from corn)
 TΤ
      Olive oil
      RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
         (corn oil processing and products comprising corn
         oil and corn meal obtained from corn)
 TТ
      Palm oil
      RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
         (corn oil processing and products comprising corn
         oil and corn meal obtained from corn)
      Proteins
      RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
         (corn oil processing and products comprising corn
         oil and corn meal obtained from corn)
 TТ
      Safflower oil
      RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
         (corn oil processing and products comprising corn
         oil and corn meal obtained from corn)
TΫ́
      Soybean oil
      RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
         (corn oil processing and products comprising corn
         oil and corn meal obtained from corn)
IT
     Sterols
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
         (corn oil processing and products comprising corn
         oil and corn meal obtained from corn)
TΤ
     Sunflower oil
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
         (corn oil processing and products comprising corn
        oil and corn meal obtained from corn)
TT
     Tocopherols
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
         (corn oil processing and products comprising corn
        oil and corn meal obtained from corn)
TT
     Vitamins
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
        (corn oil processing and products comprising corn
        oil and corn meal obtained from corn)
IT
     Corn oil
     RL: FFD (Food or feed use); IMF (Industrial manufacture); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (corn oil processing and products comprising corn
        oil and corn meal obtained from corn)
IT
     Flours and Meals
        (corn; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
IT
     Bos taurus
        (dairy cattle; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
    Vitamins
IT
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
        (fat-sol.; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
IT
     Flours and Meals
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(feather meal; corn oil processing and products comprising
          corn oil and corn meal obtained from corn)
  IT
       Aquaculture
       Bos taurus
       Equus caballus
       Poultry
       Sus scrofa domestica
          (feed for; corn oil processing and products comprising
         corn oil and corn meal obtained from corn)
 IT
      Catfish
      Tilapia
          (feeding; corn oil processing and products comprising
         corn oil and corn meal obtained from corn)
 IT
          (flour and meal; corn oil processing and products comprising
         corn oil and corn meal obtained from corn)
 TΤ
         (for food; corn oil processing and products comprising
         corn oil and corn meal obtained from corn)
 IT
      Oryza sativa
         (hulls; corn oil processing and products comprising
         corn oil and corn meal obtained from corn)
 IT
      Beverages
         (low calorie; corn oil processing and products comprising
         corn oil and corn meal obtained from corn)
 IΤ
      Feather
         (meal; corn oil processing and products comprising
         corn oil and corn meal obtained from corn)
 IT
      Bone meal
      Meat
         (meat-and-bone meal; corn oil processing and products
         comprising corn oil and corn meal obtained from
         corn)
IΤ
     Triticum aestivum
         (middlings; corn oil processing and products comprising
         corn oil and corn meal obtained from corn)
IT
      Cooking
         (oils for; corn oil processing and products comprising
         corn oil and corn meal obtained from corn)
IT
         (oilseed, meal; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
IT
     Flours and Meals
         (oilseed; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
     Fats and Glyceridic oils, biological studies
     Fats and Glyceridic oils, biological studies
     RL: BUU (Biological use, unclassified); FFD (Food or feed use); BIOL
     (Biological study); USES (Uses)
        (partially hydrogenated; corn oil processing and products
        comprising corn oil and corn meal obtained from
        corn)
IT
        (pet; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
TΤ
     Food
        (porridge; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
TΤ
    Bran
        (rice; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
ΙT
    Food
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(snack; corn oil processing and products comprising
         corn oil and corn meal obtained from corn)
 IT
      Beverages
          (sports; corn oil processing and products comprising
         corn oil and corn meal obtained from corn)
      Fats and Glyceridic oils, biological studies
 ΤT
      RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
         (stearins, oxy-; corn oil processing and products comprising
         corn oil and corn meal obtained from corn)
 IT
      Fuel oil
         (substitutes; corn oil processing and products comprising
         corn oil and corn meal obtained from corn)
 IT
      Feed
         (swine; corn oil processing and products comprising
         corn oil and corn meal obtained from corn)
      7440-37-1, Argon, biological studies 7727-37-9, Nitrogen, biological
      studies
      RL: BUU (Biological use, unclassified); FFD (Food or feed use); BIOL
      (Biological study); USES (Uses)
         (corn oil processing and products comprising corn
         oil and corn meal obtained from corn)
      56-87-1, L-Lysine, biological studies 63-68-3, L-Methionine, biological
 IT
      studies 64-17-5, Ethanol, biological studies 67-63-0, Isopropyl
      alcohol, biological studies 73-22-3, L-Tryptophan, biological studies
      77-92-9, Citric acid, biological studies
                                               77-92-9D, Citric acid,
      monoglyceride derivs. 110-54-3, Hexane, biological studies 121-79-9,
      Propyl gallate 123-28-4, Dilauryl thiodipropionate 128-37-0, BHT,
      biological studies 137-66-6, Ascorbyl palmitate 458-37-7, Curcumin
      994-36-5, Sodium citrate 1107-26-2, \beta-Apo-8'-carotenal
                                                                 6829-55-6,
     Tocotrienol
                  7235-40-7, \beta-Carotene
                                           7647-14-5, Sodium
      chloride, biological studies 7664-38-2, Phosphoric acid, biological
              9000-90-2, \alpha-Amylase 9001-92-7, Protease
                                                           9005-25-8,
     Starch, biological studies 9016-00-6, Dimethyl polysiloxane
                                                                     9032-08-0,
     Glucoamylase 25013-16-5, BHA 25395-66-8, Ascorbyl stearate
     39413-05-3, Isopropyl citrate
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
         (corn oil processing and products comprising corn
        oil and corn meal obtained from corn)
IT
     1393-63-1, Annatto
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
        (ext.; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
     124-38-9, Carbon dioxide, biological studies
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
        (supercrit.; corn oil processing and products comprising
        corn oil and corn meal obtained from corn)
=> s triticale
          1923 TRITICALE
           126 TRITICALES
1.9
          1931 TRITICALE
                 (TRITICALE OR TRITICALES)
=> s 19 and corn
        111199 CORN
           345 CORNS
        111319 CORN
                 (CORN OR CORNS)
L10
           250 L9 AND CORN
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=> s 110 and fuel

340874 FUEL 154939 FUELS 389767 FUEL

(FUEL OR FUELS)

L11

2 L10 AND FUEL

=> d l11 ti

L11 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN Quality of solid biofuels - database and field trials

=> d l11 2 ti

L11 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

Protein byproduct recovery in fuel ethanol processing of agricultural materials

=> d l11 1 all

L11 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

Full. Text

AN 1999:713328 CAPLUS

DN 132:24771

ED Entered STN: 09 Nov 1999

Quality of solid biofuels - database and field trials TΙ

Hartmann, H.; Maier, L.; Bohm, T. ΑU

Research Center of Agricultural Engineering, Munich University of CS Technology, Freising-Weihenstephan, D-85354, Germany

Biomass: A Growth Opportunity in Green Energy and Value-Added Products, SO Proceedings of the Biomass Conference of the Americas, 4th, Oakland, Calif., Aug. 29-Sept. 2, 1999 (1999), Volume 1, 273-279. Editor(s): Overend, Ralph P.; Chornet, Esteban. Publisher: Elsevier Science, Oxford,

CODEN: 681QAG

DTConference

English

CC 52-1 (Electrochemical, Radiational, and Thermal Energy Technology) Section cross-reference(s): 11, 40, 60

Quality aspects of solid biofuels were investigated in a new database. AR Most parameters varied greatly, particularly when annually harvested biomass was considered. For planning purposes the frequency distributions should be used rather than mean values. The quality of some crops may be changed by modified agricultural practices. Rainfall shortly after cutting can deplete chlorine and potassium in grass by 60 to 80%. ST

solid biofuel quality database field trial; fuel gas manufg solid biofuel

IT Fuels

> (biofuels, solid; field trials of solid biofuel quality and database of identity, age, origin, fuel characteristics, element and compd. content, testing methodol., related literature)

IT Beech (Fagus)

Miscanthus

Spruce (Picea)

Wheat straw

(chlorine content of solid biofuel, from database)

TТ Straw

Straw

(corn; chlorine content of solid biofuel, from database)

IT Bagasse

Bark

Compost

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Databases
       Grass (Poaceae)
      Hay
      Leaf
      Straw
          (field trials of solid biofuel quality and database of identity, age,
         origin, fuel characteristics, element and compd. content,
          testing methodol., related literature)
 IT
      Fibers
      RL: NUU (Other use, unclassified); USES (Uses)
          (field trials of solid biofuel quality and database of identity, age,
         origin, fuel characteristics, element and compd. content,
         testing methodol., related literature)
 TT
      Mineral elements, occurrence
      RL: OCU (Occurrence, unclassified); OCCU (Occurrence)
         (frequency distribution, selected quality parameters, similar cereal
         straw types, from database)
 IT.
      Wood
         (natural, processed; field trials of solid biofuel quality and database
         of identity, age, origin, fuel characteristics, element and
         compd. content, testing methodol., related literature)
 IT
      Leaf
         (needle; field trials of solid biofuel quality and database of
         identity, age, origin, fuel characteristics, element and
         compd. content, testing methodol., related literature)
 IT
      Calorific value
         (net; frequency distribution, selected quality parameters, similar
         cereal straw types, from database)
 IT
      Flours and Meals
         (oilseed cakes; field trials of solid biofuel quality and database of
         identity, age, origin, fuel characteristics, element and
         compd. content, testing methodol., related literature)
TΤ
      Seed
      Seed
         (oilseed, meal; field trials of solid biofuel quality and database of
         identity, age, origin, fuel characteristics, element and
         compd. content, testing methodol., related literature)
IT
     Flours and Meals
         (oilseed; field trials of solid biofuel quality and database of
         identity, age, origin, fuel characteristics, element and
        compd. content, testing methodol., related literature)
IT
     Fruit
         (pips; field trials of solid biofuel quality and database of identity,
        age, origin, fuel characteristics, element and compd.
        content, testing methodol., related literature)
IT
     Fermentation
        (products, pomace; field trials of solid biofuel quality and database
        of identity, age, origin, fuel characteristics, element and
        compd. content, testing methodol., related literature)
TT
     Straw
     Straw
        (rape; chlorine content of solid biofuel, from database)
IT
     Straw
        (rye; chlorine content of solid biofuel, from database)
IT
     Nut (seed)
        (shells; field trials of solid biofuel quality and database of
        identity, age, origin, fuel characteristics, element and
        compd. content, testing methodol., related literature)
IT
    Poplar (Populus)
    Willow (Salix)
        (short rotation forestry; chlorine content of solid biofuel, from
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database)
 IT
      Corn
        Corn
      Rape (plant)
      Rape (plant)
      Rye
      Rye
      Sunflower
      Sunflower
        Triticale
        Triticale
         (straw; chlorine content of solid biofuel, from database)
 IT
      Straw
      Straw
         (sunflower; chlorine content of solid biofuel, from database)
 IT
         (triticale; chlorine content of solid biofuel, from database)
 IT
     Rye
       Triticale
     Wheat
         (whole crop; chlorine content of solid biofuel, from database)
ΙŢ
     7782-50-5, Chlorine, occurrence
     RL: OCU (Occurrence, unclassified); OCCU (Occurrence)
        (chlorine content, solid biofuels)
     7704-34-9, Sulfur, occurrence
     RL: OCU (Occurrence, unclassified); OCCU (Occurrence)
        (effect of harvesting date and field retention time, selected quality
        parameters in grass, from database)
     7440-09-7, Potassium, occurrence 7727-37-9, Nitrogen, occurrence
IT
     RL: OCU (Occurrence, unclassified); OCCU (Occurrence)
        (frequency distribution, selected quality parameters, similar cereal
        straw types, from database)
=> log y
COST IN U.S. DOLLARS
                                                  SINCE FILE
                                                                  TOTAL
                                                      ENTRY
                                                                SESSION
FULL ESTIMATED COST
                                                      138.86
                                                                139.07
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
                                                  SINCE FILE
                                                                  TOTAL
                                                      ENTRY
                                                                SESSION
CA SUBSCRIBER PRICE
                                                       -5.60
                                                                 -5.60
STN INTERNATIONAL LOGOFF AT 17:18:30 ON 29 OCT 2004
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